UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

September 4, 2013

Ms. Michelle Falesch
Enercon Services, Inc.
2056 Westings Avenue
Suite 140
Naperville, IL 60503

Re: Freedom of Information Act Request:
EPA-R3-2013-7817

Dear Ms. Falesch:

This is in response to your Freedom of Information Act request listed above, regarding 3775 Main Street Property.

/X/ The Office Of Hazardous Site Clean-up Division is enclosing records in response to your request.
/ / The Resource Conservation and Recovery Program, the Toxics Programs Branch, and the Pesticides/Asbestos Programs Branch found no records in response to your request.
/ / The Water Protection Division found no records in response to your request.

PLEASE NOTE: If any Program(s) listed above has been checked, a response from that Program(s) is enclosed along with a billing invoice for the information provided if appropriate.

You may appeal this response to the National Freedom of Information Officer, U.S. EPA Records, FOIA and Privacy Branch, 1200 Pennsylvania Avenue, NW (2822T), Washington, DC 20460, Fax: (202) 566-2147, E-mail: hq.foia@epa.gov. Only items mailed through the United States Postal Service may be delivered to 1200 Pennsylvania Avenue, NW. If you are submitting your appeal via hand delivery, courier service or overnight delivery, you must address your correspondence to 1301 Constitution Avenue, N.W., Room 6416J, Washington, DC 20004. Your appeal must be made in writing and it must be submitted no later than 30 calendar days from the date of this letter. The Agency will not consider appeals received after the 30 calendar day limit. The appeal letter should include the EPA-R3 number listed above. For quickest possible handling, the appeal letter and its envelope should be marked "Freedom of Information Act Appeal."

If you have any questions, please contact me at 215-814-5553.

Sincerely,

Richard Van Holt
Freedom of Information Officer

ORIGINAL 1P

Site Assessment CERCLIS Data Entry Form
EPA Region III

Site Name: Weirton Steel Chromic Acid Spills

Site ID#: 03 05890 DSN/ State ID: WV751 SSID/ Spill ID: A3R7 EPA ID#: WVN000305890

Site-Level Data

Modify CERCLIS Site Information: *(enter changes for site location or site type information)*
Edit Non NPL Status to Reflect SI Start Needed

Non-NPL Status: *(Verify with list of valid NPL/Non-NPL values)* SS **Status Change Date:** 5/13/10

Merge Site/ Aggregate Site: _____
(When merging or aggregating a site, identify Parent/ Child relationship - See Removal Info. Management Assistant)

☐ **Final Assessment Decision (FAD)** *(Can this site be Archived?)* **FAD Date:** _____

☐ **Archive** *(Enter FAD flag & FAD date when Archiving site)* **Archive Date:** _____
(Check that there are no Prohibited Open Actions before Archiving)

☐ **ERS Exclusion** *(An ERS Exclusion Determination Form must be completed)* **ERS Exclusion Date:** _____

☐ **NFFA (No Further Federal Action)** **NFFA Date:** _____

☐ **RCRA Deferral Special Initiative:** ☐ Lead Confirmed ☐ New Decision ☐ Further Superfund Assessment

Action-Level Data

Action Name	Lead	Start Date	Compl.Date	Qualifier
Pre-CERCLIS Screening (HX)	F EP FF S	/ /	/ /	
Discovery (DS)	F EP FF S TR		/ /	
Preliminary Assessment (PA)	F EP S SN TR	/ /	/ /	A D F G H L N W DN B SA
Fed Fac Preliminary Assessment Review (RX)	F EP S TR	/ /	/ /	A D H L N DN B SA
Site Inspection (SI)	F EP S TR	/ /	/ /	A D F G H L N W DN B SA
Fed Fac Site Inspection Review (TY)	F EP S TR	/ /	/ /	A D H L N DN B SA
Expanded Site Inspection (ES)	F EP S TR	/ /	/ /	A D F G L N W DN B SA
Fed Fac ESI Review (TZ)	F EP S TR	/ /	/ /	A D G L N DN B SA
ESI/RI (SS)	F EP MR PS RP S SN TR	/ /	/ /	A D F G L N W DN B SA
HRS Package (HR)	F EP FF S TR	/ /	/ /	D F N O W DN SA
Other Cleanup Activity (VA) *(Enter Subaction below)*	FF SR PS RP SE S SN TR	/ /	/ /	A D F H L N W DN B
☐ Comprehensive Site Investigation ☐ Remedy Selection ☐ Construction		/ /	/ /	
☐ Post-Construction Maintenance ☐ Design ☐ Short Term Cleanup				
Site Reassessment (OO)	F EP S TR	/ /	/ /	A D F G H L N W DN B SA
Laboratory Support (LA) *(add only when using START Contract)*	F EP FF MR SR PS RP SD S SN TR	/ /	/ /	

Start Date - date site is initiated
Completion Date - date site is archived

aw 5/13/10

Site Assessment Manager (SAM) Signature	05/13/2010 Date	Information Mgmt. Assistant Signature	6/2/10 Date
Site Assessment Branch Chief Signature	5-28-10 Date	GPRA/Data Quality Coordinator Signature	6/8/10 Date

ORIGINAL

Site Assessment CERCLIS Data Entry Form
EPA Region III

See Code Guide for Instructions

Site Name: Weirton Steel Chromic Acid Spills

WasteLAN ID#: 03 05890 DSN: WV-751 EPA ID#: WVN000305890

Site-Level Data

Edit CERCLIS/WasteLAN Identifying Information: (Site Name, Address, City, County, County ID, State, Zip Code)

Explain:

Site Type: (See Attachment A for a list of valid options)

Non-NPL Status: (See Attachment A for a list of valid options) ACV 12/30/04

Collapsed Site Name: (Enter the 'child' site to be merged into the 'parent' site above) ID#:

Parent/Child Relationship:

☐ Archive (See Attachment A: Prohibited Open Actions at Archived Sites) Archive Date:

☐ ERS Exclusion: (An ERS Exclusion Determination Form must be completed) ERS Exclusion Date:

☐ Final Site Assessment Decision (FSAD) FSAD Date:

☐ NFFA (No Further Federal Action) NFFA Date:

☐ RCRA Deferral Audit Special Initiative ☐ Lead Confirmed ☐ New Decision ☐ Further Superfund Assessment

Action-Level Data

Action Name	Lead	Start Date	Compl.Date	Qualifier
Pre-CERCLIS Screening (HX)	F FF S	/ /	/ /	
Site Discovery (DS)	F EP FF S TR	/ /	/ /	
Preliminary Assessment (PA) ✓	F EP S SN TR	11/30/04 ✓	12/30/04 ✓	A D F H L N W DN B SA
Old Fac Preliminary Assessment Review (RX)	F EP S TR	/ /	/ /	A D H L N DN B SA
Site Inspection (SI)	F EP S TR	/ /	/ /	A D F H L N W DN B SA
Site Inspection Prioritization (SH)	F EP S TR	/ /	/ /	A D F H L N W DN B SA
Combined PA/SI (NX)	F EP S TR	/ /	/ /	A D F H L N W DN B SA
Site Reassessment (OO)	F EP S TR	/ /	/ /	A D F H L N W DN B SA
Expanded Site Inspection (ES)	F EP S TR	/ /	/ /	A D F G L N W DN B SA
Old Fac Site Inspection Review (TY)	F EP S TR	/ /	/ /	A D H L N DN B SA
Old Fac ESI Review (TZ)	F EP S TR	/ /	/ /	A D G L N DN B SA
RI/FS (SS)	F EP MR PS TR RP S SN TR	/ /	/ /	A D F G L N W DN B SA
ROD Package (HR)	F EP FF S TR	/ /	/ /	D F N O W DN SA
Emrgncy Rmvl Assess and Preliminary Assess (QT)	F EP S TR	/ /	/ /	A D F H L N W DN B SA
Emrgncy Rmvl Assess and Site Inspection (QS)	F EP S TR	/ /	/ /	A D F H L N W DN B SA
Other Cleanup Activity (VA)	FF SR PS RP SE S SN TR	/ /	/ /	H L
☐ Comprehensive Site Investigation ☐ Remedy Selection ☐ Construction		/ /	/ /	
☐ Post-Construction Maintenance ☐ Design ☐ Short Term Cleanup				
Laboratory Support (LA) Start Date - date site is initiated Completion Date - date site is archived	F EP FF MR SR PS RP SD S SN TR	/ /	/ /	
Comfort / Status Letter Start Date - date letter requested Completion Date - date of letter	FE	/ /	/ /	WL RE

Authorization Signature & Date	Information Mgmt. Assistant Signature & Date	GPRA/Data Quality Coord. Signature & Date
03/05/08 For K. ANDERSON		3/14/04

02/04/2008

REMEDIAL SITE ASSESSMENT DECISION - EPA REGION 3

1F

Site Name: Weirton Steel Chromic Acid Spills **EPA ID#:** WVN000305890 **DSN:** WV-
Alias Site Names:

City: Weirton, **County:** Hancock County **State:** WV

Refer to Report Dated: 08/30/2007 **Report type:** PA
Report developed by: WVDEP

ORIGINAL

DECISION:

M **2. Further Assessment Needed Under CERCLA:** 2a. (optional) Priority: | | Higher M | Lower
2b. Activity Type: | | PA | | ESI | | Other: _____ | | SI | | HRS evaluation

DISCUSSION/RATIONALE:

Weirton Steel Chromic Acid Spills Latitude N 40.42000 Longitude W -80.60306
400 Three Springs Drive
Weirton, Hancock County, WV 26062

Superfund assigns a **LOW** qualifier & **(Assessment Complete - AC)** Non-NPL status to the Weirton Steel Chromic Acid Spills based on the following points :

- the February 2008 HUD PCB Spill's decision
- the 2004 Weirton Steel Chromic Acid Spills' score equivalent (**10.6**; sw-20.95; soil-3.21; gw-0; Air-0)
- the 11/30/2004 Weirton Steel Chromic Acid Spills's Preliminary Assessment
- the EPA Emergency Response sent an OSC
- the state referral from Jamie Fenke (WVDEP DWM inspector)
- the 2003 mitigation/ cleanup of spill
- the short term impact of the May 13-16, 2002 chromic acid spill
- the May 13-16, 2002 pipe failure resulted in 850-gallons of chromic acid spill

Superfund recommends the following course of action :

- map and add the details of water suppliers, FINDS/ Federal Register System, population center
- document FINDS/ Federal Register System results
- map and add prior & current analytical results to the map
- evaluate the need of direct Push temporary wells for future assessment & Ground penetrating radar,
- Collect organic & inorganic samples of Surface water and the appropriate backgrounds .
- Collect organic & inorganic samples of soil and the appropriate backgrounds .
- Collect organic & inorganic samples of groundwater and the appropriate backgrounds .
- implement 2004 sampling recommendations

Weirton Steel Chromic Acid Spills came to EPA-Superfund attention in May 13-16, 2002 when an On-Scene Coordinator Dennis Matlock started investigating a state referral from Jamie Fenke (WVDEP DWM inspector). The Weirton Steel's pipe failure resulted in 850-gallons of chromic acid spill releasing (via the waste water treatment plant) to the Ohio River at mile point 62.5. Weirton Steel Chromic Acid Spills' reflected hexavalent chromium, other metals, cyanide, trichloroethane, other volatile organic compounds.

Weirton Steel reflects a long history of spills and other activities which may impact human health and the environment. Weirton Steel Chromic Acid Spills' location generates both sheet and tin-mill products. Weirton Steel Chromic Acid Spills's location reflects the one of the largest tin-mill producers in the world. After 1996-2000, Weirton Steel invested $12.2 million for environmental upgrades, paid $3.2 million in penalties involving 3 governmental agencies, and $1.6 million to improve its waste water treatment plant. After 1984-1996, Weirton Steel invested $113 million for environmental upgrades. The company employs 3,000 people.

The water supply data in proximity to Weirton Steel reflects the following points :
- The City of Weirton, West Virginia operates a Ohio River intake 2-miles downstream from the site and serves 35,000 persons. The City of Steubenville, Ohio operates an Ohio River intake 0.25-miles downstream from the site & serves 40,000 persons. The City of Follansbee operates the Follansbee Well Field's the three wells present on site, <one has been shut down and replaced with a newly drilled well that so far shows no contamination (1991)> and serves 4,000 people. The City of Hooverson Heights operates an Ohio River intake and serves 5,000 persons. The City of Hammond operates the Hammond Public Service District. The Hammond Public Service District operates an Ohio River intake and serves 2,239 persons. The Jefferson County Water System's purchases their water from the City of Steubenville's Ohio River intake and serves 16,800 persons of which 2,759 persons live in the a 4-mile radius.

Weirton Steel Chromic Acid Spills' CERCLA file reflect a November 2004 report.

Report Reviewed/Approved and Site Decision Made By: James J. Hargett Jr, Site Assessment Manager **Signature:** _____ **Date:**

EPA Form # 9100-3

REMEDIAL SITE ASSESSMENT DECISION - EPA REGION III

EPA ID: WVN000305890 **Site Name:** WEIRTON STEEL CHROMIC ACID SPILLS **State ID:** ORIGINAL

Alias Site Names:

City: WEIRTON **County or Parish:** HANCOCK **State:** WV

Refer to Report Dated: 08/30/2007 **Report Type:** PRELIMINARY ASSESSMENT 001

Report Developed by: STATE

DECISION:

- [ ] **1. Further Remedial Site Assessment under CERCLA (Superfund) is not required because:**
  - [ ] **1a. Site does not qualify for further remedial site assessment under CERCLA (No Further Remedial Action Planned - NFRAP)**
  - [ ] **1b. Site may qualify for action, but is deferred to:**
- [X] **2. Further Assessment Needed Under CERCLA:**
  - **2a. Priority:** [ ] **Higher** [X] **Lower**
  - **2b. Other: (recommended action)** Low

DISCUSSION/RATIONALE:

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"Weirton Steel Chromic Acid Spills' CERCLA file reflect a November 2004 report.

Site Decision Made by: JAMES HARGETT

Signature: _____ **Date:** 12/30/2004

ORIGINAL
(RED)

POLREP #2 AND FINAL
WEIRTON WATER INTAKE
3031 BIRCH DRIVE (MILE POINT 65.2 OHIO RIVER)
WEIRTON, HANCOCK COUNTY, WV 26062
ATTN: CHARLIE KLEEMAN, GREGG CRYSTALL, AND ERD-OERR

I. SITUATION (THURSDAY, 9/22/94, 1200 HOURS)

A. ON TUESDAY, 9/20/94, 0900 HOURS, OSC JACK DOWNIE WAS NOTIFIED BY OHIO RIVER VALLEY SANITATION COMMISSION (ORSANCO) PETER TENNANT, THAT BROMODICHLOROMETHANE, BROMOFORM, TOLUENE, AND OTHER UNKNOWN VOLATILE CONSTITUENTS WERE DETECTED IN THE WEIRTON, WV MUNICIPAL WATER TREATMENT PLANT (WTP) RAW WATER INTAKE. THE OSC UPDATED WVDEP AND DISPATCHED TAT TO CONDUCT AN OVERFLIGHT OF THE OHIO RIVER TO DOCUMENT ANY UNUSUAL DISCHARGE CONDITION. TAT DOCUMENTED A SHEEN EMANATING FROM AN OUTFALL AT THE WEIRTON STEEL PLANT. THE OSC THEN DIRECTED TAT TO COORDINATE ADDITIONAL ACTION WITH ORSANCO AND COLLECT SAMPLES THROUGHOUT THE AREA AROUND THE WEIRTON STEEL OUTFALL AND WEIRTON WATER INTAKE.

B. TAT COLLECTED A TOTAL OF FOUR SURFACE AND DEPTH SAMPLES. THE SAMPLES WERE DELIVERED TO THE WHEELING WATER TREATMENT PLANT FOR VOLATILE ORGANIC ANALYSIS AS PER ARRANGEMENTS MADE BY ORSANCO. ANALYSIS TO BE COMPLETED BY 9/21/94.

II. ACTIONS TAKEN

A. ON 9/21/94, AT 1430 HOURS, TAT RECEIVED A VERBAL NOTIFICATION FROM THE WHEELING TREATMENT PLANT REGARDING ANALYTICAL RESULTS OF THE FOUR WATER SAMPLES COLLECTED. ALL SAMPLE RESULTS WERE NON DETECTED FOR THE VOLATILE ORGANIC COMPOUNDS OF CONCERN.

III. FUTURE PLANS

A. ORSANCO TO REASSESS THE ORGANICS DETECTION SYSTEM (ODS) AT THE WEIRTON WTP.

B. OSC ANTICIPATES NO FURTHER EPA EMERGENCY RESPONSE ACTIONS AT THIS TIME.

JACK L. DOWNIE, OSC
U.S. EPA - REGION III
WHEELING, WV

CERCLIS CORRECTION / UPDATE FORM

ORIGINAL (Red)

TO: Information Management Section (3HW14) DATE: 12-20-96

FROM: James J. Hargett Jr.
Site Assessment Section (3HW33)

SITE: **WEIRTON STEEL CYANIDE SPILL**

ID#: WVD988803219 DSN: WV-595

A. CHANGE OF NAME, ADDRESS, OR OTHER IDENTIFYING INFORMATION (Explain.)

ARCHIVE - ARCHIVE Date 12-01-96

B. ENTER NEW INFORMATION / CHANGE INFORMATION (Fill in appropriate spaces.)

Type of Action	Start Date	Completion Date	Lead (F or S)	Priority/Qualifier* (N, L, H, D, or G)	SIP Level** (1, 2, or 3)
PA					
SSI					
SIP					
ESI					

*allowable codes are N, L, H, or D for PAs, SSIs, and SIPs; N or G (Prepare HRS Package) for ESIs

**SIPs only

C. MERGE / DELETE (Explain.)

D. OTHER: CANCEL / HOLD / ETC. (Explain.)

06/93; EPA / Region 3 / HWMD / SAS (KJW)

ORIGINAL (Red)

Ref 4903

CERCLIS CORRECTION / UPDATE FORM

TO:	Information Management Section (3HW14)	DATE:	03-17-95
FROM:	James J. Hargett Jr. Site Assessment Section (3HW73)		
SITE:	WEIRTON STEEL CYNAIDE SPILL		
ID#:	WVD988802~~2922~~ 3219	DSN:	WV-595 ✓

A. CHANGE OF NAME, ADDRESS, OR OTHER IDENTIFYING INFORMATION (Explain.)

B. ENTER NEW INFORMATION / CHANGE INFORMATION (Fill in appropriate spaces.)

Type of Action	Start Date	Completion Date	Lead (F or S)	Priority/Qualifier* (N, L, H, D, or G)	SIP Level** (1, 2, or 3)
PA	02-03-95	02-28-95	F	L	
SSI					
SIP					
ESI					

* allowable codes are N, L, H, or D for PAs, SSIs, and SIPs; N or G (Prepare HRS Package) for ESIs

** SIPs only

C. MERGE / DELETE (Explain.)

D. OTHER: CANCEL / HOLD / ETC: (Explain.)

08/93; EPA / Region 3 / HWMD / SAS (KJW)

Entered 3/29/95 ay

Rec'd 3/23/95 DD Reviewed + Assigned for data input

ORIGINAL (Red)

DIVISION OF ENVIRONMENTAL PROTECTION

GASTON CAPERTON
GOVERNOR

1356 Hansford Street
Charleston, WV 25301-1401

LAIDLEY ELI MC COY, PH.D.
DIRECTOR

August 7, 1995

Mr. James Hargett
USEPA Region III (3HW72)
841 Chestnut Building
Philadelphia, Pennsylvania 19107

Dear Mr. Hargett:

Enclosed is a copy of the Weirton Steel Cyanide Spill Preliminary Assessment Report which was previously submitted during the second quarter of the 94-95 Cooperative Agreement. Please call me with questions concerning this transmittal at (304) 558-2745.

Sincerely,

Rusty T. Joins
Engineering Technician
Site Investigation and Response Section
Office of Waste Management

Enclosure

RTJ/mlc

cc: Brenda J. Wingate
Pamela D. Hayes

ORIGINAL (Red)

PRELIMINARY ASSESSMENT LETTER REPORT

FOR

WEIRTON STEEL CYANIDE SPILL SITE,

WEIRTON, HANCOCK COUNTY,

WEST VIRGINIA

WV - 595

JANUARY 17, 1995

SITE INVESTIGATION AND RESPONSE SECTION

WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION

OFFICE OF WASTE MANAGEMENT

Prepared By:

Philip L. Keffer

Philip L. Keffer
Engineering Technician

Reviewed By:

For TWB

Thomas W. Blake
Environmental Resources Program
Manager I

ORIGINAL (Red)

TABLE OF CONTENTS

ORIGINAL (Red)

1.1 Authorization

This Preliminary Assessment (PA) Environmental Letter Report is prepared by the West Virginia Division of Environmental Protection - Office of Waste Management - Site Investigation and Response Section (WVDEP - OWM - SIR) under Cooperative Agreement (V-993229-01-0) with the United States Environmental Protection Agency (USEPA) Region III for the Weirton Steel Cyanide Spill site, WV-595, Weirton, Hancock County, West Virginia. Authorization is by Section 104 (Public Law 93-510 Seq.) of the Comprehensive Environmental Response Compensation and Liability Act of 1980 and by the Superfund Amendments and Reauthorization Act (SARA) of 1986.

2.1 Ownership History

1909 - 1929	Weirton Steel Company
1929 - 1983	Weirton Steel Division (WSX) National Steel Corporation (NSC)
1976 - 1982	NSC Used WSX As a Cash Cow WSX Facilities Harvested Down-sizing of Mill
1984 - Present	NEW ESOP Company Weirton Steel Corporation (WSC) Initial Public Offering 5/3/89

2.2 Site Location

The site is located in Weirton, Hancock, County, West Virginia at Mile Point 63 of the Ohio River. The geological coordinates for Mile Point (MP) 63 are 80°36'17" West Longitude and 40°24'50" North Latitude.

The Weirton Steel Corporation (WSC) is located in a urban section of Weirton, West Virginia, along the East bank of the Ohio River. Surrounding land uses include those of industrial, commercial, and residential. The WSC site is bordered by the Ohio River on its western side.

2.3 Site Layout

Control of access to the WSC facility is accomplished with chain link fencing around the entire 335 acre property. A site location map can be found in this report under Attachment A - Figure 1.

On July 14, 1993, at approximately 0500 Hours, a flange or gasket within the flange failed on the return plating line #4 between the

ORIGINAL (Red)

Pre-Coat Tanks and the Distribution Tanks spraying 2,500 gallons of pickling solution into a catch basin which is directed to one of the facility's waste water treatment plant (WWTP) where, after a five hour retention/treatment time, it was discharged into the Ohio River. (1)

The solution contained:

1,000 pounds of Sodium Bifluoride,
300 pounds of Stannous Chloride,
6 pounds of Hydrochloric Acid
55 pounds of Sodium Ferrocyanide. (3)

The United States Environmental Protection Agency Weston Technical Assistance Team (USEPA TAT) was contacted by Mr. Dave Minda of WSC. USEPA Region III Technical Assistance Team (TAT) Senior On-Scene Coordinator (OSC) Downie dispatched a team on-site to investigate the incident. OSC Downie also contacted Ms. Cindy Rice of the United States Department of the Interior, Fish and Wildlife Service. Ms. Rice stressed the documentation of wildlife found within the spill area which could be potentially impacted, with a particular reference to birds.

TAT arrived on-site and met with the West Virginia Division of Natural Resources (WV DNR) representative Mr. Fenske. Mr. Fenske, who had been collecting routine water samples from the Ohio River in the area on the previous night, informed TAT that he had not noticed any stressed river wildlife while performing sample collection. (3)

As TAT began their investigation of the reported incident, there was a visible sheen surrounding NPDES Discharge Outlet #0003336. TAT obtained 6 Draeger Tube readings for Cyanide. Five tubes had negative results and one read 2.0 Mg/M_3. TAT then collected and preserved 12 water samples for Total Cyanide and Total Metals Analysis. These samples were collected at NPDES Discharge Outlet #0003336, as well as upstream and downstream. TAT observed no fish kill or stressed wildlife, although the sheen was visible from the Probable Point of Entry (PPE) at Ohio River Mile Point (MP) 63 downstream to MP 65. (3)

On July 15, 1993, TAT continued their investigation of the incident along the Ohio River spill site and still did not locate a fish kill or any stressed wildlife. The sheen on the Ohio River, which had been clearly observed on July 14, 1993 was no longer visible. (3) (See Attachment C - Figure 3 for Analytical Results.)

The broken line was repaired and Mr. Vignovic, a Weirton Steel Corporation representative, stated that a baffle would be installed to separate the pickling and scrubber areas from the pre-coat tanks, which would hamper any future occurrence of a similar situation. (2)

2.4 Removal Actions To Date

There has been no remedial/removal actions to date. However, Weirton Steel Corporation has repaired the damaged flange which caused the spill to occur on July 14, 1993; therefore, forestalling future problems of the same nature at the incident site.

3.1 Water Supply

3.2 Ground Water and Hydrogeology

The nearest drinking water well is located approximately 3,500 feet Northeast of the site on Kings Creek. (1)(4)

The Hancock County, West Virginia Health Department (HCHD) identified well usage within a total of 4 areas in West Virginia. The areas which were identified are along Kings Creek, North Fork, Hudson Hill and Wiley Ridge Roads, and also in the area around Lyons Road. (1)(4)

There are 79 residences which use private wells located along Kings Creek. There are a few residences along the Ohio River, North of its confluence with Kings Creek which utilize private wells as their primary source of drinking water. The wells along Kings Creek are assumed to serve 194 persons. (1)(4)

There are 87 residences along North Fork Road and Hudson Hill Road with private drinking water wells. There is also North Fork Mobile Home Park which has a private water system supplied by a well. These wells are assumed to serve 213 persons. (1)(4)

There are 145 residences along Wiley Ridge Road, Northeast of the site with private water wells. According to the HCHD, this area has residences which utilize both private wells and public connections with the Weirton Municipal Water System. These wells are assumed to serve 355 persons. (1)(4)

There are 76 residences on Lyons Road with private water wells. These residences are also connected to the municipal water system. The HCHD stated that it is unlikely that these residences use private wells for drinking water due to sewage contamination of the area's ground water. It is assumed that 186 personal could utilize the aforementioned private wells on Lyons Road. (1)(4)

There are 11 other wells in use which are scattered throughout an unnamed area East of the site. Two of these wells are part of a private system which serves the Nells Mobile Home Park and one provides water to Callier Industries, Inc. The 11 wells are assumed to serve 22 persons. (1)(4)

Several residences in Washington County, Pennsylvania are located between 3 to 4 miles East of the site and are assumed to use private drinking well water. (1)(4)

There is insufficient information at this time to determine the ground water flow direction. However, wells located along the Ohio River and completed in the alluvial deposits are likely influenced by the river stage. Ground water flow in shallow hilltop and hillside wells completed in fractured bedrock formations is likely to follow overlying topographic features.

3.3 Surface Water

It is assumed by the nature of the site and the regulated NPDES discharge points from the site that all of the approximately 335 acres of WSC is the drainage area for the site.

Weirton Municipal Water Board obtains its water from a surface water intake located approximately 3.1 miles South of the site, just below Ohio River MP 65. (1)(4)

The WSC facility obtains drinking water for the site from a surface water intake located 1.0 mile upstream near Ohio River MP 62. (1)(4)

The City of Steubenville, Ohio obtains drinking water from a surface water intake located 3.1 miles Southwest of the site below Ohio River Mile Point 65. (1)(4)

Hooverson Heights, West Virginia Public Water District obtains drinking water from a surface water intake located approximately 7.75 miles downstream of the site, above Ohio River Mile Point 71. (1)

The 4-mile radius study area encompasses approximately 1,279 acres of Riverine Wetlands Area. (1) This area consists of the Ohio River, which is designated as a Riverine Lower Perennial Open Water Non-Tidal Permanently Flooded Area. Wetland frontage is 30 miles within the site's 15-mile downstream study area.

There are wetlands located in West Virginia at Harmon Creek and the backwater areas at the mouths of Cross Creek and Buffalo Creek on the Ohio River. (1)(4)

The Harmon Creek wetlands, which are approximately located at Ohio River MP 66.5, encompass approximately 10 acres. Wetlands in this area are of the Palustrine System, Unconsolidated Bottom and Emergent Class. Water regime in this wetland is temporarily flooded and semi-permanently flooded. (1)

The Cross Creek embayment is located approximately at Ohio River Mile Point 71.5 and encompasses approximately 150 acres. Wetlands within this area are of the Paulstrine System, Unconsolidated Bottom, Scrub Shrub, and Emergent Class. The water regime in this wetland is temporarily flooded and semi-permanently flooded. (1)

The Buffalo Creek embayment is located approximately at Ohio River Mile Point 74.75 and is considered by the West Virginia Division of Natural Resources (WVDNR) - Wildlife Resources Section to be a high priority backwater area. (1) Beginning at the PPE, for the entire 15-mile downstream study area, the Ohio River is considered to be a fishery in addition to a high quality stream. Kings Creek, North, and upstream of the site, is considered a high quality stream and fishery. (1)(4)

3.4 Demographics

A geographic distribution of ground water wells and an estimated number of ground water users for the 4-mile study area is as follows: (4)

DISTANCE FROM SITE	# WELLS	ESTIMATED # OF USERS
On-site	0	0
0 - 1/4 mile	0	0
1/4 - 1/2 mile	21	53
1/2 - 1 mile	51	130
1 - 2 miles	146	369
2 - 3 miles	465	1,169
3 - 4 miles	772	1,942
TOTAL:	**1,455**	**3,663**

The above referenced numbers are based on professional judgement developed from information gathered from local water departments and the Hancock County Health Department. Therefore, the numbers in the above table are only estimates. The estimated populations are taken from the WV - Weirton Drum Disposal site.

The setting for the WSC site and study area is urban and suburban. Outlying areas in Hancock and Brooke Counties of West Virginia, as well as that of Washington County in Pennsylvania and Jefferson County in Ohio are predominantly rural. A population break down by mile is as follows: (4)

RADIUS DISTANCE FROM SITE	ESTIMATED POPULATION
On-site	0
0 - 1/4 mile	15
1/4 - 1/2 mile	635
1/2 - 1 mile	2,429
1 - 2 miles	10,895
2 - 3 miles	13,724
3 - 4 miles	9,303
TOTAL 0 - 4 MILES:	**37,001**

The estimated populations are taken from the WV - Weirton Drum Disposal site.

3.5 Critical Environment

The Cheat Minnow (Rhinichthys bowersi) has been identified in surface water within 4-miles of the site. The Cheat Minnow is ranked C2 in the State of West Virginia Natural Heritage Program, which means that the species is imperiled in the State with only 6 to 20 occurrences.

There are greater than 30 miles of wetland frontage within the 15-mile downstream study area. Approximately 1,171 acres of wetlands are situated within four miles of the site.

4.0 Waste Types and Quantities

On July 14, 1993, a flange or gasket at the Weirton Steel Corporation (WSC) plating line #4 failed which released 2,500 gallons of a pre-coating solution. This line, which is used to transport the pre-coating solution into the distribution tank, contained:

1,000 pounds of Sodium Bifluoride,
300 pounds of Stannous Chloride,
6 pounds of Hydrochloric Acid
55 pounds of Sodium Ferrocyanide. (3)

The failure and release allowed the solution to flow into a catch basin located beneath the pickling tank, scrubber tank, and four pre-coat tanks. From the catch-basin, the material flowed into one of WSC's waste water treatment plants which is located along the Ohio River near Mile Point (MP) 63. From the waste water treatment plant, the material was discharged to the Ohio River through a permitted discharge (#0003336). Therefore, the material is un-contained. (Attachment B - Figure 2) (2)(3)

5.0 References

1. United States Geological Service (USGS) 7.5 Topograhical Maps of: Steubenville East, West Virginia - Ohio; Steubenville West, Ohio - West Virginia; Knoxville, Ohio; and Weirton, West Virginia, 1968.

2. Easton, James A., West Virginia Division of Environmental Protection - Office of Waste Management: Spill Investigation Report of the Weirton Steel Cyanide Spill, July 14, 1993.

3. United States Environmental Protection Agency - Region III - Technical Assistance Team: Weirton Steel Cyanide Spill - POLREPS #'s 1, 2, and 3, July 14, 1993 through August 9, 1993.

4. Ecology and Environment, Inc., Arlington, Virginia: Environmental Site Assessment of the Weirton Drum Disposal Site, February 5, 1993.

5. Sargetn, Barbara, Environmental Resources Specialist, West Virginia Department of Natural Resources: "United States Natural Heritage Program Letter," November 17, 1994.

6.0 ATTACHMENTS:

A. Site Location Map (Figure 1)

B. Site Layout Map (Figure 2)

C. Waste Analytical Results (Figure 3)

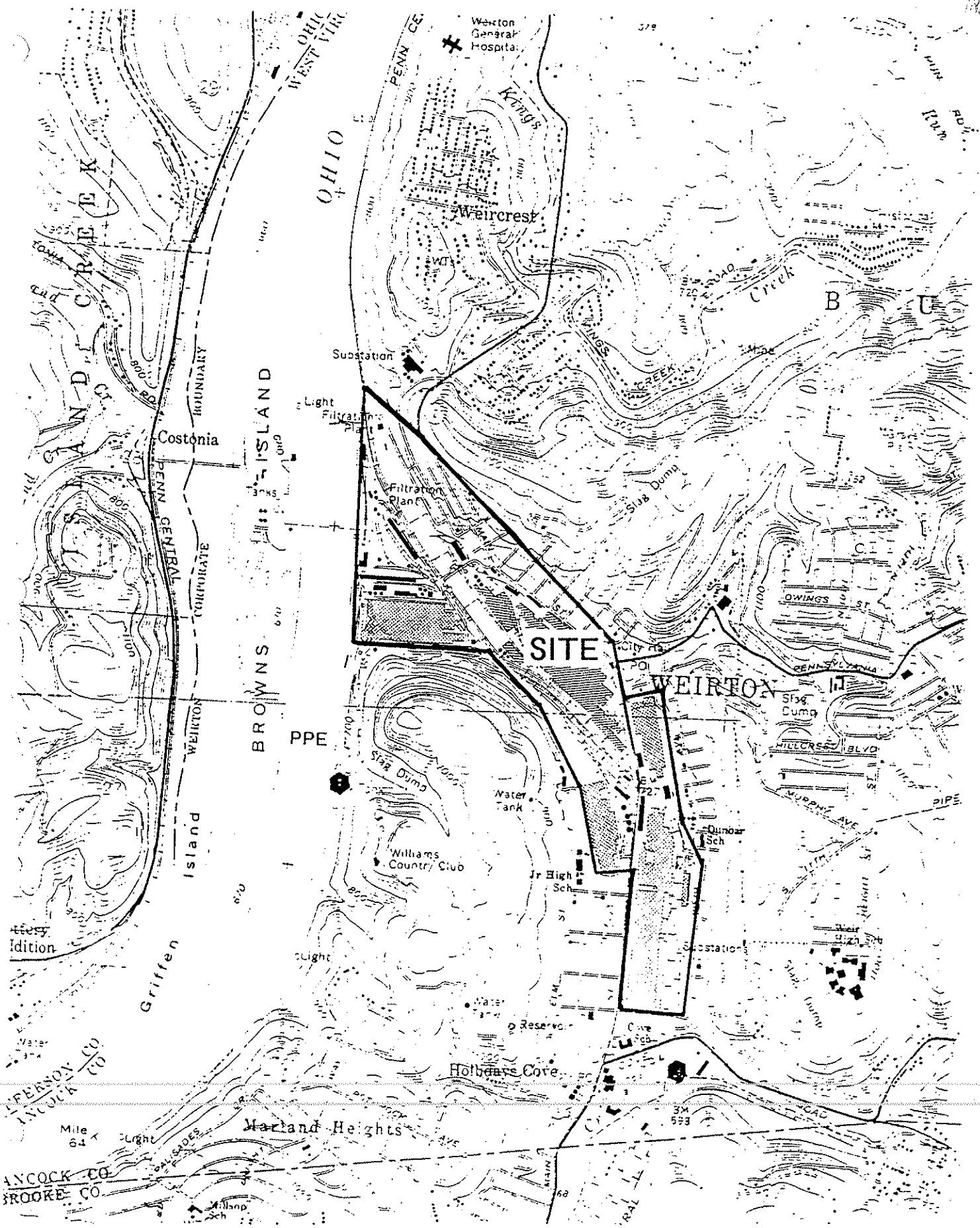
ATTACHMENT A

(Figure 1)

SITE LOCATION MAP

SITE LOCATION MAP
WEIRTON STEEL CYANIDE SPILL

FIGURE 1



ATTACHMENT B

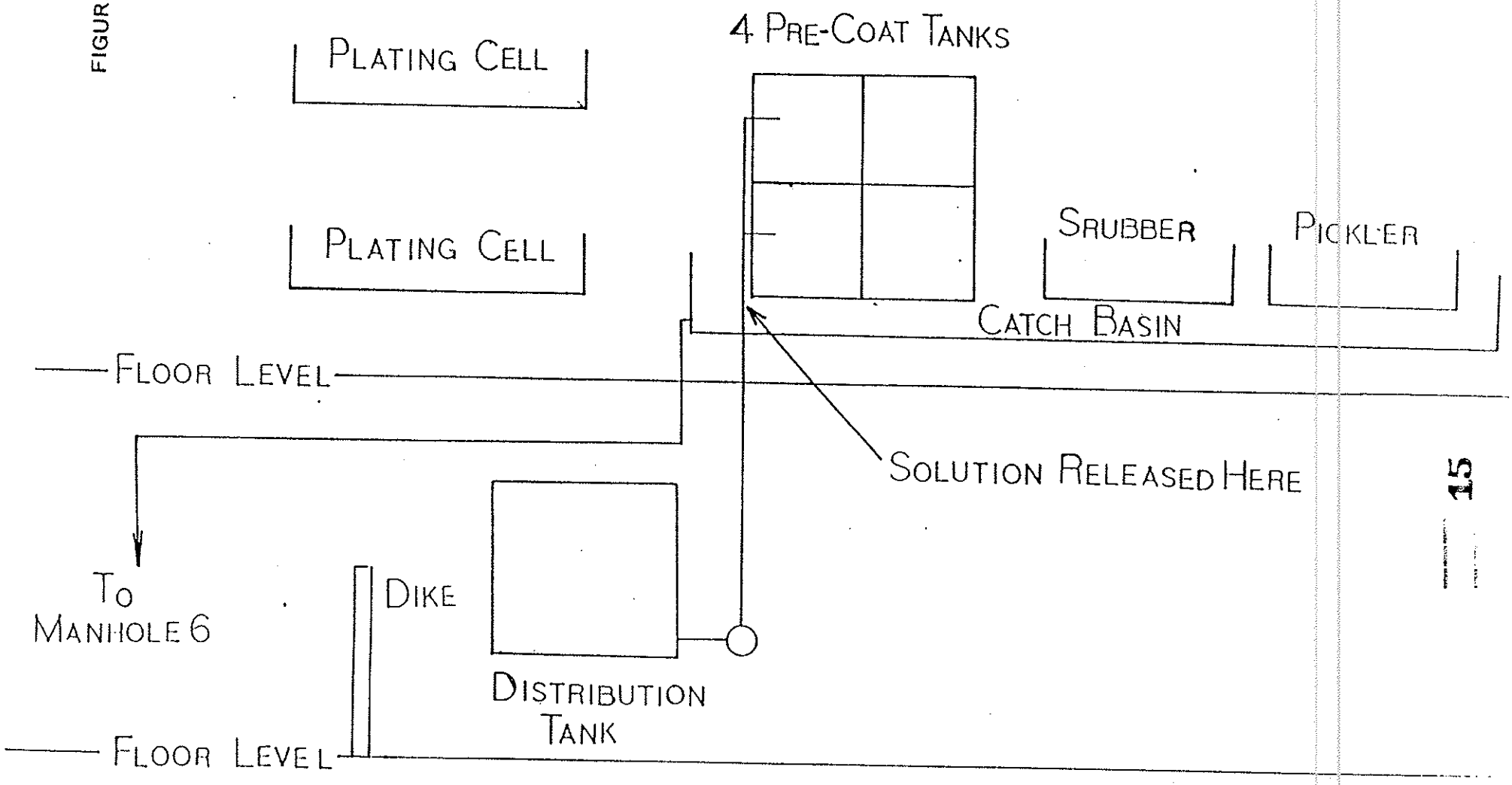
(Figure 2)

SITE LAYOUT MAP

ORIGINAL (Red)

FIGURE 2

#4 PLATING LINE SPILL
07-14-93



WEIRTON STEEL CYANIDE SPILL
SITE LAYOUT MAP

ATTACHMENT C

(Figure 3)

WASTE ANALYTICAL RESULTS

INORGANIC RESULTS

PARAMETER	RESULTS	MDL	QUAL	UNITS
Cyanide	ND	0.01		mg/l

Date Extracted: N/A
Date Analyzed: See Laboratory Chronicle
Dilution: 1

ORIGINAL (Red)

Client:

NAC Job

Client

Lab Sampl

PARAMETER	RESULTS	MDL	QUAL	UNITS
Antimony	ND	0.01		mg/l
Arsenic	0.005	0.005		mg/l
Beryllium	ND	0.005		mg/l
Cadmium	ND	0.003		mg/l
Chromium	0.31	0.01		mg/l
Copper	ND	0.025		mg/l
Lead	ND	0.005		mg/l
Mercury	ND	0.0002		mg/l
Nickel	ND	0.04		mg/l
Selenium	ND	0.005		mg/l
Silver	ND	0.01		mg/l
Thallium	ND	0.005		mg/l
Zinc	0.41	0.02		mg/l

ate Extracted: N/A
ate Analyzed: See Laboratory Chronicle
ilution: 1

ORIGINAL
(Red)

[redacted]

PARAMETER	RESULTS	MDL	QUAL	UNITS
Cyanide	0.021	0.01		mg/l

[redacted]

Date Extracted: N/A
Date Analyzed: See Laboratory Chronicle
Dilution: 1

Client:
NAC Job
Client ID:
Lab Sample

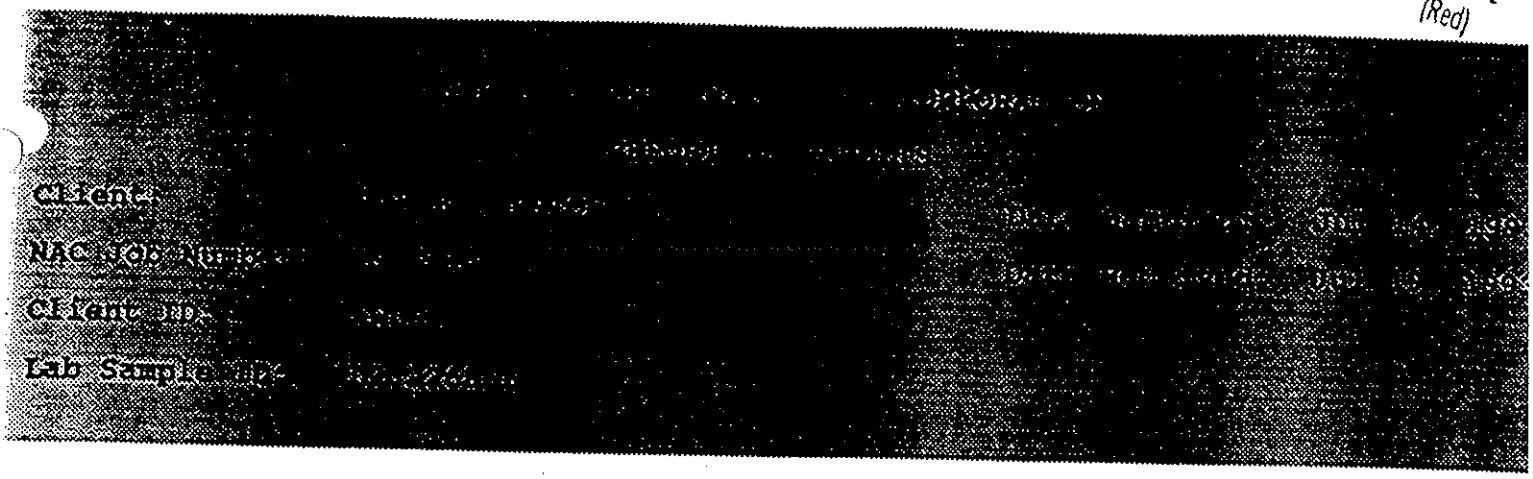
PARAMETER	RESULTS	MDL	QUAL	UNITS
Antimony	ND	0.01		mg/l
Arsenic	ND	0.005		mg/l
Beryllium	ND	0.005		mg/l
Cadmium	ND	0.003		mg/l
Chromium	0.61	0.01		mg/l
Copper	ND	0.025		mg/l
Lead	0.0052	0.005		mg/l
Mercury	ND	0.0002		mg/l
Nickel	ND	0.04		mg/l
Selenium	ND	0.005		mg/l
Silver	ND	0.01		mg/l
Thallium	ND	0.005		mg/l
Zinc	0.76	0.02		mg/l

Date Extracted: N/A
Date Analyzed: See Laboratory Chronicle
Dilution: 1

ORIGINAL
(Red)

PARAMETER	RESULTS	MDL	QUAL	UNITS
Cyanide	ND	0.01		mg/l

ate Extracted: N/A
ate Analyzed: See Laboratory Chronicle
ilution: 1

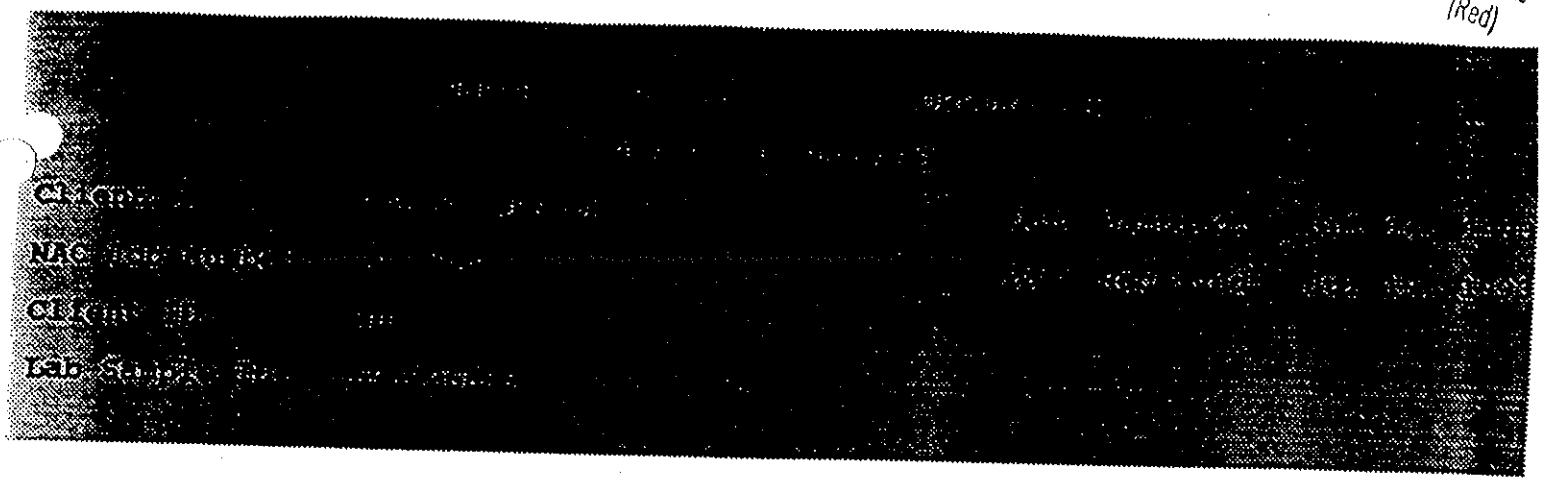


Client:
NAC NO:
Client SDG:
Lab Sample ID:

PARAMETER	RESULTS	MDL	QUAL	UNITS
Antimony	ND	0.01		mg/l
Arsenic	ND	0.005		mg/l
Beryllium	ND	0.005		mg/l
Cadmium	ND	0.003		mg/l
Chromium	ND	0.01		mg/l
Copper	ND	0.025		mg/l
Lead	ND	0.005		mg/l
Mercury	ND	0.0002		mg/l
Nickel	ND	0.04		mg/l
Selenium	ND	0.005		mg/l
Silver	ND	0.01		mg/l
Thallium	ND	0.005		mg/l
Zinc	ND	0.02		mg/l

Date Extracted: N/A
Date Analyzed: See Laboratory Chronicle
Dilution: 1

ORIGINAL
(Red)



PARAMETER	RESULTS	MDL	QUAL	UNITS
Cyanide	0.021	0.01		mg/l

ate Extracted: N/A
ate Analyzed: See Laboratory Chronicle
ilution: 1

ORIGINAL (Red)

PARAMETER	RESULTS	MDL	QUAL	UNITS
Cyanide	ND	0.01		mg/l

ate Extracted: N/A
ate Analyzed: See Laboratory Chronicle
ution: 1

PARAMETER	RESULTS	MDL	QUAL	UNITS
Antimony	ND	0.01		mg/l
Arsenic	ND	0.005		mg/l
Beryllium	ND	0.005		mg/l
Cadmium	0.013	0.003		mg/l
Chromium	ND	0.01		mg/l
Copper	0.061	0.025		mg/l
Lead	0.011	0.005		mg/l
Mercury	ND	0.0002		mg/l
Nickel	ND	0.04		mg/l
Selenium	ND	0.005		mg/l
Silver	ND	0.01		mg/l
Thallium	ND	0.005		mg/l
Zinc	0.093	0.02		mg/l

ate Extracted: N/A
ate Analyzed: See Laboratory Chronicle
ution: 1

ORIGINAL (Red)

DIVISION OF ENVIRONMENTAL PROTECTION
1356 Hansford Street
Charleston, WV 25301-1401

GASTON CAPERTON
GOVERNOR

DAVID C. CALLAGHAN
DIRECTOR

February 3, 1995

Mr. James Hargett (3HW72)
USEPA Region III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

Dear Mr. Hargett:

Enclosed is the Draft Preliminary Assessment Letter Report for the Weirton Steel Cyanide Spill Site, WV-595, Weirton, Hancock County, West Virginia.

On July 14, 1993, a flange or gasket in the Weirton Steel Corporation number four plating line failed causing a release of 2,500 gallons of a pre-coating solution containing sodium ferrocyanide. The solution entered the on-site waste collection system which directed the spill to the facility's waste water treatment plant and was then discharged to the Ohio River.

Following the release, USEPA Region III Technical Assistance Team (TAT) performed a visual survey and observed an oily sheen on the Ohio River. In addition to the visual survey, TAT collected samples from the Ohio River near the discharge point. Two of the samples indicated the presence of cyanide up to 0.021 mg/l.

According to West Virginia Division of Environmental Protection (WVDEP) records, similar spills have occurred at the Weirton Steel Corporation facility prior to and following the July 14, 1993, spill. Due to the frequency and nature of the spills, an order was issued by WVDEP which requires the facility to pay penalties based on the type and size of the spill.

Based on the penalty assessments, outlined in the order issued by West Virginia Division of Environmental Protection, the limited affect caused by this spill, and the subsequent dilution of the material after reaching the Ohio River, it is recommended that no further CERCLA Pre-Remedial Site Assessment action be taken at this site.

You may direct your comments to Mr. Philip L. Keffer or me at (304) 558-2745.

Sincerely,

Rusty T. Joins
Engineering Technician
Site Investigation and Response Section
Office of Waste Management

Enclosure

RTJ/mlc

cc: Pamela D. Hayes
Brenda J. Wingate